

the collection of the Bombay Natural History Society. I examined 11 females, of which 9 had clear orange skin around the eyes. The circumorbital skin colour was not clear on specimen # 11447, collected by P.T.L. Dodsworth on 13.i.1913 from Karka, N.W. Himalayas. A remark on the tag read, "Irides reddish-brown." Specimen # 11450, collected by V.S. Lapersonne on 29.v.1929 from Chitteri Range, Salem at 2,000, was marked as a female and had a quarter moon-shaped orange area below the eye. This specimen also had a relatively more prominent casque than that of the others.

It is, however, possible that the colours of bare skin and irides may vary according to the emotional state of the bird and the resulting endocrinal secretions. Outside of the breeding season, probably the bare skin of both sexes may well be dark grey to black, and that of the female

changes only during courtship and times of excitement.

The shape of the casque, the extent of yellow on the bill, and the colour of the irides are used to separate sexes of the Indian grey hornbill in the field. These field-marks can now be supplemented by the differences in their circumorbital skin also.

ACKNOWLEDGEMENTS

I thank S.A. Hussain, T.J. Roberts and R. Kannan for their comments on these observations.

March 23, 2001
AASHEESH PITTIE
8-2-545 Road No. 7, Banjara Hills,
Hyderabad 500 034,
Andhra Pradesh, India.
Email: aasheesh@vsnl.in

REFERENCES

- ALI, S. & S.D. RIPLEY (1987): Compact Handbook of the Birds of India and Pakistan together with those of Bangladesh, Nepal, Bhutan and Sri Lanka. 2nd edition, Oxford University Press, Delhi. Pp. 292.
- BAKER, E.C. STUART (1927): The Fauna of British India including Ceylon and Burma. Birds. Vol. IV, 2nd edition. Taylor and Francis, London. Pp. 301-302.
- KEMP, ALLAN (1995): The Hornbills. Oxford University Press, Oxford. Pp. 157-159.
- ROBERTS, T.J. (1991): The Birds of Pakistan. Vol. 1. Regional Studies and non-Passeriformes. Oxford University Press, Karachi. Pp. 532-534.

27. SIGHTING OF MALABAR PIED HORNBILL *ANTHRACOCEROS CORONATUS* IN SANJAY GANDHI NATIONAL PARK, MUMBAI

On July 30, 2000, during a walk in the Sanjay Gandhi National Park (SGNP), Mumbai, at 0845 hrs we stumbled upon a noisy flock of Indian grey hornbill *Ocyrceros birostris*. There were four individuals to our left, coursing restlessly through the thick canopy about 40 m away. We were at an elevation and the birds, though about 10 m from the ground were exactly level with us. While we were contemplating the reason for such aggressive behaviour, another much larger and darker bird emerged from the thick cover. It was still partly hidden and difficult to identify, but as soon as it alighted from a tall *Adina cordifolia* tree, the white trailing edge on its predominantly black wings and white outer

tail feathers disclosed its true identity. The bird being mobbed by the four Indian grey hornbills was the Malabar pied hornbill *Anthracosceros coronatus*. Soon, *A. coronatus* was chased away by the four birds and the flock disappeared into the canopy.

However, within five minutes these noisy hornbills returned to the same area, but perched slightly closer to us. This time there were two *A. coronatus*. One bird was identified to be a female from the absence of the black patch at the posterior end of its casque, while the sex of the other bird could not be determined. The four *O. birostris* always kept a close vigil, but never advanced too close to the larger species.

O. birostris has been observed to nest in this area, due to the presence of huge trees, and its aggression towards its conspecifics could be justified. However, both birds breed between March and June in their respective ranges (Ali and Ripley 1987), and a fight over a nesting site is quite unlikely in July. A detailed study is required to comment conclusively on it.

A. coronatus was never reported from Sanjay Gandhi National Park until February 6, 2000, when one bird was sighted by a group of bird watchers in the same valley, called the Pongam Valley due to a profusion of *Pongamia pinnata*. Subsequently, there have been a few confirmed and unconfirmed records of the bird from various parts of the Park.

According to Ali (1996), the bird is found in south and central India: north to southeast Uttar Pradesh, Bihar and Orissa. Grimmett *et al.* (1999) mention its distribution in the Western Ghats and east India.

Anthracoseros coronatus is mainly frugivorous, but can also subsist on small reptiles, mice and juvenile birds as has been reported by Ali and Ripley (1987). The present sighting of *A. coronatus* is almost six months after its first record from SGNP. It is evident, therefore, that the birds, which presumably strayed or were released into SGNP (a Tropical Moist Semi-deciduous Forest) outlived the harsh summer and acclimatized to their newly found home. Our next step should be to examine whether the species attempts to breed here, provided that both sexes are present.

Additional Note from first author

I was at Sanjay Gandhi National Park on March 9, 2003 and was fortunate to spot a female

A. coronatus with a flock of *O. birostris* in precisely the same spot as the first sighting. Over three years have passed since *A. coronatus* was first sighted, and since then, a female bird has been regularly seen by many bird watchers including the first author near the Pongam Valley, moving boldly with a flock of *O. birostris*. It is, therefore, clear that the bird has adapted to the Moist Semi-deciduous Forest of SGNP. The most striking feature of the sighting is that the larger *A. coronatus* seems to be enjoying a congenial relationship with the smaller, but more numerous hornbill *O. birostris*. I have seen the two species in other forests of India as well, sometimes even sharing the same tree, but have never observed any significant interaction between the two. Thus, this three-year association between the two related yet distinct species is unique and worth mentioning — A.A.

October 16, 2000

ANISH ANDHERIA
2, Sagar Building,
V.P. Road, Andheri (West),
Mumbai 400 058,
Maharashtra, India.
Email: anish@kidsfortigers.org

SUPRIYA JHUNJHUNWALA
Bombay Natural History Society,
Hornbill House, S.B. Singh Road,
Mumbai 400 023, Maharashtra, India.
Email: supriya.jhunjunwala@ceeindia.org

PARITOSH KHANVILKAR
5-Parimal, 17th Road,
Khar (W), Mumbai 400 052,
Maharashtra,
India.

REFERENCES

- ALI, S. & S.D. RIPLEY (1987): Compact Handbook of the Birds of India and Pakistan together with those of Bangladesh, Nepal, Bhutan and Sri Lanka. 2nd edn, Oxford University Press, Delhi, pp. 737 + 104 plates.
- ALI, S. (1996): The Book of Indian Birds (12th Edn). Bombay Natural History Society, Mumbai.
- GRIMMETT, R., C. INSKIPP & T. INSKIPP (1999): Birds of the Indian Subcontinent. Oxford University Press, New Delhi.